

Research on the use of virtual playing fields for monitoring various sports

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Abstract

The essential purpose of this research study is measure the use of virtual playing fields for monitoring various sports. This research study depends upon primary data analysis research measure the virtual playing fields related to the monitoring various sports. Research based on survey methods develops research questions related to the variables. for measuring the research study used smart PLS software and generate different results related to the variables. the R square, co-linearity statistic, total effects, significant analysis, also that smart PLS Algorithm model related to the use of virtual playing fields for monitoring various sports. Overall result founded that virtual playing felid is most important for monitoring various sport activities. Result also founded that there are positive and significant use of virtual playing fields for monitoring various sports

Keywords: virtual playing fields (VPF), monitoring various sport (MVS), smart PLS Algorithm

1. Introduction

Creating an innovative environment in the field of sports helps in the advancement of the sports field. Sports is the favorite recreational activity of most people all over the world. And modernizing the sports field using technology-based software is of utmost importance. For this purpose, virtual technology-based software techniques are used in different sports grounds (Tjønndal, 2022). Virtual environments and technology-based backgrounds in sports stadiums help advance the sports field.in many sports fields all over the globe, the use of virtual reality grounds is essential. These virtual grounds monitor every aspect of various sports played in these Fields. The complete monitoring of athlete performance and body language is also under the control of virtual sports grounds. High-maintenance sports, as well as recreational sports, use virtual technology-based environments to attract the audience towards the sports. The key features like visualization and interaction are made using the virtual reality technique in the sports field. The chances of the audience's interaction with the various sports increases when virtual technology is used in multiple sports management systems (Javaid & Haleem, 2020). Most sports management system of sports field uses the new technology software to advance the field of sports. Using innovative strategies using technology software is also the work of sports management system.

The use of virtual sports grounds offers several benefits. The first benefit is that these virtual grounds create a natural environment for playing particular sports. Like it maintains special environmental conditions to allow the performance of various sports (Yeotkar & Gaikwad, 2019). The second benefit of the virtual environment is that it helps monitor all the activities in the sports field. The third benefit is that it

helps detect the player's movement and posture during the games and then provides the performance graph of the athlete. Performance graph evaluates each player's sports performance and tells the athlete about his flaws in the game. The fourth benefit is that virtual ground uses a hybrid monitoring system to provide efficient and timely data regarding sports tactics. The fifth benefit of virtual technology used in sports grounds is that it captures the 3D images of every part of the sports field (Pang et al., 2021). The virtual ground's benefits make them best to use in the sports field. Also, various VR technologies and software in virtual sports grounds hold significance. The software includes CAVE and HMD. Both virtual reality software is used in virtual sports ground for visualization and monitoring systems and aid in enhancing the visualization of the sports field.

Virtual reality grounds are made using innovative technology that can detect the performance of multiple sports players simultaneously. This virtual reality technology provides multiple visual images of various sports athletes (Soltani & Morice, 2020). For example, in the sport of soccer, the detection of the movement of the player with the soccer is made using the virtual technology of virtual grounds. Soccer trainers and coaches can also improve players' performance by viewing their posture during the game. The complete information regarding all the soccer player's movements is provided to the coaches through the virtual technology system. So, virtual reality technology in soccer fields is very important for players and coaches. Also, many mage sports events are covered using virtual reality technologies (Cristaldi et al., 2020). Virtual reality covers every aspect of the mega sports events and provides even the minor detail of the whole sports events. All the mega events of football, cricket, and tennis matches are organized using the virtual technology system in the management system of these events.

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Virtual grounds provide information regarding various features. Like information regarding the spatial angles in sports, the feature is provided with the help of virtual technology systems. The information regarding the velocity, acceleration, etc., is provided under acoustic information through the virtual ground technology system (Nambi et al., 2020). Information regarding the player's distance from the target is calculated accurately using the virtual reality technology-based sports ground. Tactile information provides data regarding the force feedback using virtual reality technology. Feedback made using the virtual technology helps minimize the learning period. All these features of virtual ground provide information regarding various sports-related terms. The information regarding the posture detection of athletes using VR technology helps avoid the chances of injuries during the game (Jayakumar et al., 2021). All these informative features of the virtual ground make this technology unique from others. Also, when complete information regarding every aspect of various sports is available through virtual environments, then the chances of developing the better and improved sports field increase tremendously.

Virtual sports grounds are built using virtual reality technology and are the most advanced sports grounds all over the globe. Their features and advantages make these grounds unique and fascinating. Making impossible events possible is the specialty of virtual sports grounds. Improving the learning and performing abilities of sports athletes is all because of VR technology systems. Increasing the accessibility of remote sports teaching and learning is the feature of virtual ground. Captivating the audience towards sports by providing an aesthetic view to the audience is the main aim of the use of virtual reality grounds (Roell et al., 2018). These virtual reality grounds feature is because of modern technology-based advanced software in the sports field. The use of this technology-based software programming in the sports field has revolutionized the field of sports to a great extent. Governments worldwide are improving their sports field using virtual reality grounds to develop their sports field. All the highly maintenance sports and high-profile sports are being played in virtual reality grounds to maintain the efficiency and worth of these sports. In addition to improving the sports field, many sports stakeholders and sports industries are trying their best to make gadgets based on virtual technology to enhance the performance of their sports players and make their industries the best in the world (Vater et al., 2020). The future of sports is all based on technology, so to improve this field, it is essential to use the most innovative form of virtual reality technology-based system in the sports field.

2. Research objectives

This research paper explains the importance of virtual playing fields for monitoring various sports and athletes' performance. Various features and advantages of virtual reality grounds in sport field has also been discussed here.

This research study represents the research on the use of virtual playing fields for monitoring various sports research study describe the objective of research and also that present research question. The second portion describes that overall review of research also describe the hypothesis development. The third chapter represents the methodology of research study, tools, techniques, methods of research study also describe that econometric model and theoretical model. The fourth chapter describe result and its descriptions this chapter present that smart PLS Algorithm model between variables and the last chapter summarized overall research study this part explain some recommendations about monitoring various sports and virtual playing fields also present that limitations about research.

3. Literature Review

With the rapid development of science and technology, information technology has provided its various applications to every developing sector including sport sectors. With the help of innovative technologies, many virtual playing fields has been developed which in turn also promote sports monitoring (Pastel et al., 2021). In this research article, researcher claimed that an effective training environment with uniform, controlled, and stereoscopic conditions can be created using virtual reality (Westmattmann et al., 2021). It was highlighted that due to the rapid emergence of information technology and artificial intelligence, target tracking, virtual reality and Image recognition technologies have been extensively used in various fields, especially in the areas of augmented reality, security monitoring and monitoring of various sport (Chao & Gang, 2021; Rigamonti et al., 2020). Furthermore, in this research article, author examined the various virtual playing field and their influences on the monitoring of various sport system (Nicolò et al., 2020). It was examined that virtual playing fields have various applications in the monitoring of sport by utilizing information technology as well as artificial intelligence (Ji et al., 2022). Many scholars have presented the research on the sport monitoring system, and develop and design the C/S phase of sport performance training process monitoring system utilizing Global positioning system to achieve the real-time exact position of sports people as well as provide guidance for sports people (Dugalić, 2018). The system depends on portable artificially intelligent terminal software, which seems combined with athlete qualities (Cranmer et al., 2021). Moreover, it was investigated that sports inherently demand fast and efficient movements, which can be tough to players to be perfect

but also for trainers and coaches to evaluate and viewers to monitor (Akbaş et al., 2019). Because of the design of most sports, monitoring with sensors as well as many other monitoring devices attached to players (Nadeem et al., 2021). This opens a wide range of possibilities for the use of techniques for computer vision to benefit athletes, trainers, as well as the audiences. In addition, researcher claimed that virtual playing fields have significant applications to sports training and often use 3D graphics to simulate real-world surroundings, offering athletes with an immersive environment. The technology of virtual reality also used in several applications of sports psychology (Sawan et al., 2020). When athletes enter into a virtual reality playing field, they involved in the simulations and can acquire hands-on experience practicing specific abilities (Scataglini et al., 2020). Apart from this, many scholars examines the development and use of virtual environments or virtual playing fields in the field of sports monitoring as well as investigation in high-performance and recreational sports. Specifically, the research concentrates on the study of the monitoring of the high-performance sports (Ma et al., 2020). The employment of virtual characters receives a lot of attention and significance and it was claimed that virtual playing fields have ability to enhance the performance of athletes by providing accurate information and guidance to the athletes. It was also examined that virtual playing fields also accelerates the training routines of athletes (Petri, Ohl, et al., 2018) (Li, 2021). Author investigated that nowadays with the development of technology; it seems significant to use virtual reality playing fields in the monitoring or sports system in order to meet the requirements of the modern developing sports system (Hurley, 2021). Virtual reality technology, usually described as spiritual technology, and has been using in various virtual playing fields especially in sport sector for monitoring various sports. With the help of virtual reality (VR) technology, people will be able to communicate with the virtual environment using their visual, aural, tactile, and other perceptions to create the impression that they were actually playing on a real basketball court (Blas et al., 2020). Basketball sports utilize VR technology in a scientifically-based, innovative, and engaging manner (Liu, 2021). In this research, it is investigated that VR technology basically includes virtual environment modeling technology, motion human body modeling techniques, and interactive technology (Li et al., 2021). Through this technology, virtual playing fields have become able to enhance the performance of the athletes (Luo et al., 2021). The key to simulating human body movements involves human body modeling technology. The human body has divided into three layers: skin, flesh, and bone. Furthermore, the virtual sports playing fields modeling comprises physical objects, virtual people, and lighting field changes (Schack et al., 2020). Many scholars claimed that the virtual playing fields training

system has become necessary and usual training system among professional sports teams (Li et al., 2020). Monitoring of the various sports and players physical activities through virtual playing fields allow athletes to known about their playing styles, physical condition, and athletes' fatigue during matches or trainings (Mataruna-Dos-Santos et al., 2020). Moreover, with the help of various sensing technologies, cameras that have been utilized in VR playing fields can monitor real time information about players speed, position, heart rate as well as overall performance during training or sport match which in turn can also highlights the factor that can improve performance of the athletes (Hodges et al., 2021). Apart from this, researcher highlighted that nowadays, three different types of sports monitoring systems have been widely using including video systems based on several automated cameras, GPS global positioning system as well as local positioning system (LPS) (Lu et al., 2020). In addition, it was explored that VID has various applications in the monitoring of sport performance by utilizing high resolution cameras in order to monitoring sport player on the pitch (Rajšp & Fister Jr, 2020). The fascinating aspect of this virtual technology was that it enables us to duplicate the tracks all around the field, giving us access to some critical information for monitoring the body movements and activities of the players, not only at an interpersonal basis, but also in terms of the relationships that occur within the teams (Aroganam et al., 2019; Bird, 2020) (Li, 2021). It was also described in this research that the proper use of virtual reality technology in virtual playing fields can make a significant difference in an ability of athletes to perform and grow over time. It enables athletes to simulate various competitive scenarios, become more engaged about their recoveries, and train using an information strategy (Fedoruk, 2020). Much other research investigated those technological advancements such as 3D modeling, motion capture, as well as application sensors, have had a significant influence on the design of uniforms, helmets, glove, and pads to assure the comfort of athletes. More precisely, smart helmets have had a significant impact on how athletes play during match (Petri, Bandow, et al., 2018).

Hypothesis Development

H1= There are positive and significant use of virtual playing fields for monitoring various sports.

H2= There are negative but its significant use of virtual playing fields for monitoring various sports.

4. Research Methodology

This research study represents that research on the use of virtual playing fields for monitoring various sports. This research study based on survey methods for determines the research used specific questions related to the variables. This research study depends upon primary data analysis for collecting the data used

specific questions related to the variables included independent and dependent variables. The virtual playing is independent and monitoring various sports is dependent variable. The smart PLS software used for determine the research the R square, Model fitness analysis, co-linearity statistic, also that path coefficient, significant analysis also that total residual effect used for measuring the research between them.

Econometric Model

This model explains the relation between two variables included independent and dependent as equation form such as:

$$MVS = \alpha + VPF\beta_1 + \varepsilon \quad (1)$$

Where:

MVS= monitoring various sports

VPF= virtual playing fields

Virtual playing fields

Virtual reality technology is the technology that uses intelligence-based software to provide better visualization. Virtual technology in playing fields works by setting up virtual computer-based systems. Virtual fields are the most advanced virtual technology-based fields used in most of the playing sports. Using virtual technology in virtual playing fields helps run multiple computer systems in these playing fields. In virtual playing fields, the use of virtual technology is made for enhancing the working of these playing fields. Virtual reality techniques are used in the computer software of the playing field and all of its management systems. The use of virtual reality in playing fields provides the audience with the most realistic atmosphere. Virtual reality creates a realistic image of the world using its technology-based system so that the audience of virtual playing fields can enjoy various sports being played in these virtual fields. The virtual playing fields consist of drone cameras as well as virtual reality sensors. The virtual reality-based sensors used in virtual fields help detect various sports parameters. These sensors also detect athletes' behavior and body language. Virtual reality fields ensure that users of virtual sports fields get a smooth visual experience by maintaining two key features first is latency and the second feature is frame rate.

Virtual reality technology has three types that provide better visualization effects. The first is full visualization, the second type provides Para visualization, and the third provides OS-LEVEL visualization. These three types of visualization are possible using virtual reality technology. The software virtual reality technology uses includes; EServer, KVM, and Parallels Desktop. This software makes the working of virtual reality systems more efficient and smoother. Virtual fields use virtual technology software and generate virtual images of the sports field. These images provide detailed information regarding the whole playing field. Virtual playing field also helps the coaches of various games to teach their athletes with right ways of playing sports. Teaching

various game tactics becomes easy using virtual playing fields. Virtual reality playgrounds offer better visual effects, better management of sports fields, better management of all the sports field-related circumstances, management of all the sports field-related statistics, and management of all the systems and software of sports playing fields. All these benefits make the use of virtual reality technology the most appropriate technology used in the managing system of virtual playing fields.

In many sports fields worldwide, virtual playing fields use virtual reality broadcasting systems to provide the audience with the best experience. The use of these VR broadcasting systems by virtual playing fields is a great source for developing and advancing the sports field. This broadcasting Virtual reality technology in sports is the most advanced virtual reality technique. This technique has opened a new horizon for the sports field. In many countries all over the globe, the use of such broadcasting VR techniques is now common because of the advancement of virtual technology over the past few years (Zhao, 2021).

VR fields in sports

In the area of sports, virtual reality technology is broadly used for improving various sports. The development, management, and advancement of all sports depend on virtual reality techniques in the working system of various sports. This technology in the sports field enhances the performance of sports athletes by providing them with essential metrics regarding sports. All the data regarding athletes' timing, body posture, Responses, etc., can be obtained easily through virtual technology. The related data is then used to solve problems related to athlete body movement and game tactics. Coaches also pay attention to improving athlete performance using virtual reality technology because it provides them with the right information regarding the athletes. Virtual reality techniques used in the sports field allow us to predict the decision-making ability of sports athletes. This prediction helps the athlete as well as the coaches. In many sports, virtual reality is used to improve the sports field and boost athlete abilities. For example, in the sport of football, virtual reality puts the athlete under a high-pressure environment to see the athlete's reaction during such circumstances. Virtual reality guides the player to make the right move during such conditions by estimating athlete behavior under such circumstances. The virtual playing fields used in various sports include; Forever Darts, Carve Snowboarding, and 2MD: VR Football Unleashed. The virtual environment of such a sports field enables the athletes to level up their game by providing them with different situations.

In many sports, it's sometimes become difficult for the coaches to predict and identify the various skills of an athlete. To identify the silks of anticipation, intelligence, and reflexes in athletes, coaches use virtual reality technology in the training sessions of various sports. By identifying such skills in the athlete coaches can polish

these silks of athlete and can make their athlete good at playing a particular sport.

In the sport of cricket, the use of virtual technology holds significance because it is a sport that is watched all over the world. Improving the sport of cricket to maintain its value among cricket audiences is done through the use of virtual reality technology in the cricket field. In the cricket field, all the computer-based software works using virtual reality. Also, in the cricket field, all the technology-based systems like drones, cameras, etc., work using virtual reality technology. By using virtual technology, these drones provide 3D images of every part of the sports field and provide the viewers and spectators of the sports field with the best and most unique experience. Cricket is a huge sport with millions of fans all over the globe, so maintaining the working system of this sport using the most advanced technology is indeed the need of the present world. Virtual reality is the only technology-based system that can fulfill the expectations of the cricket audience by providing them with the best cricket visuals. Another great benefit of using virtual reality in sports is provided directly or indirectly to sports industries. Sports industries get a huge advantage by using virtual reality technology in the sports field. In the present era of technology, the advancement, as well as the development of sports industries, is all because of the use of virtual reality systems in the sports field.

5. Result and descriptions

Table-1

Total Effects

Variables	Monitoring various sports	Virtual playing fields
MVS1	0.921	
MVS2	-0.054	
MVS3	0.157	
MVS4	0.182	
MVS5	0.093	
VPF1		0.125
VPF2		0.608
VPF3		0.399
VPF4		0.116

Smart PLS Algorithm

VPF5 0.108

The above result represent that total effects result shows that monitoring various sports and virtual playing fields relation with other variables. the MVS1, MVS2, MVS3, MVS4 and MVS5 present that values are 0.921, -0.054, 0.157, 0.182 and 0.093 these are all present that total effects with other variables. the virtual playing fields present that 12%, 60%, 39%, 11% and 108% total effects with monitoring sport levels.

Table-2

Co-linearity Statistic analysis

variables	VIF
MVS1	1.051
MVS2	1.045
MVS3	1.048
MVS4	1.056
MVS5	1.045
VPF1	1.047
VPF2	1.860
VPF3	1.996
VPF4	1.698
VPF5	1.610

The above result describe that co-linearity statistical analysis result shows that VIF values, of each variables. according to the result its VIF values are 1.051, 1.045, 1.048, 1.056, 1.047, 1.860, 1.996, 1.698 and 1.610 these are all present that positive co-linearity statistic with each other for determine the research on the use of virtual playing felids for monitoring various sports.

Table-3

R square

Variable	R square	R square Adjusted
Monitoring various sports	0.806	0.804

The above table present that R square values of dependent variable according to the result its R square value is 0.806 and its adjusted R square value is 0.804 respectively. result present that 80% data and research is reliable for analysis.

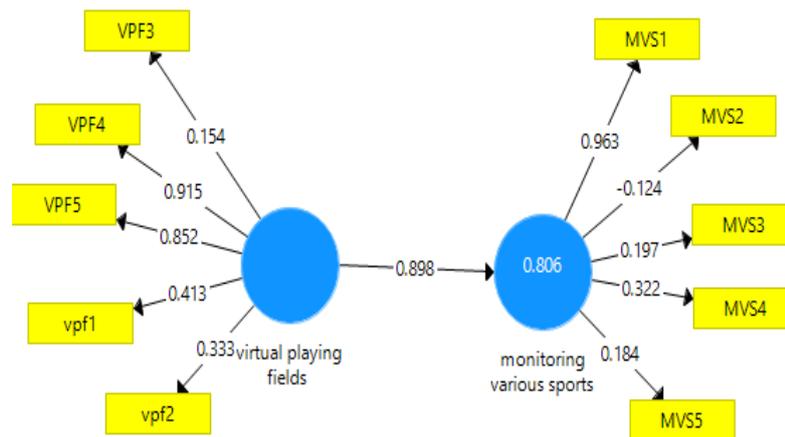


Figure: PLS Algorithm

The above model describes that PLS Algorithm relation between virtual playing fields and monitoring various sports. According to the above model values of Virtual playing fields are 0.333, 0.413, 0.852, 0.915, and 0.154

present that 33%, 41%, 85%, 91% and 15% all of them present positive relation. The monitoring various sports shows that 18%, 32%, 19%, and 96% positive values between them.

Table-4

Indicator correlation

variables	No.	Missing	Mean	Median	Min	max	Standard Deviation	Excess Kurtosis	Skewness
MVS1	1	0	1.840	2.000	1.000	5.000	0.869	1.899	1.156
MVS2	2	0	1.970	2.000	1.000	5.000	0.830	0.376	0.589
MVS3	3	0	2.050	2.000	1.000	3.000	0.740	1.169	-0.081
MVS4	4	0	3.270	4.000	1.000	5.000	1.277	0.791	0.650
MVS5	5	0	3.300	4.000	1.000	5.000	1.235	-0.961	0.436
VPF1	6	0	3.290	4.000	1.000	5.000	0.667	-0.711	0.669
VPF2	7	0	1.660	2.000	1.000	3.000	1.256	-0.718	0.523
VPF3	8	0	2.050	2.000	1.000	3.000	0.740	-1.169	0.081
VPF4	9	0	1.750	2.000	1.000	4.000	0.805	0.054	0.840
VPF5	10	0	1.650	1.000	1.000	4.000	0.817	0.806	1.180

The above result describes that indicator correlation result present that means values, median, minimum, and maximum. The result represents that standard deviation, excess kurtosis rates and also present skewness values of each variable factor. The mean value of MVS1, MVS2, MVS3, MVS4, and MVS5 are 1.840, 1.970, 2.050, 3.270, and 3.300, respectively its standard deviation values are 0.869, 0.830, 0.740, 1.277 and 1.235 all of them are present that positive deviate from mean. The excess Kurtosis rate of each factor is 1.899, 0.376, 1.169, 0.791, and -0.961 showing positive and some negative values. The

skewness rates of 1.156, 0.589, -0.081, 0.650 and 0.436 present positive skewness rates of monitoring various sports. The Virtual playing is considering as independent its mean values are 3.290, 1.660, 2.050, 1.750 and 1.650 respectively shows that positive average values of each factors. Its standard deviation rates are 1.235, 0.667, 0.740, 0.805 and 0.817 shows that positive deviate from mean. Result present that overall median rate is 2.000 its minimum value is 1.000 and the maximum value is 5.000, respectively; the skewness value shows that positive effect between them.

Table-5

Significant Analysis

Matrix	Original sample	Sample Mean	Standard Deviation	T statistic	P values
MVS1<-Monitoring Various sports	0.963	0.892	0.101	9.563	0.000
MVS2<-Monitoring Various sports	-0.124	-0.131	0.194	0.637	0.524
MVS3<-Monitoring Various sports	0.197	0.095	0.421	0.468	0.640
MVS4<-Monitoring Various sports	0.322	0.273	0.220	1.460	0.014
MVS5<-Monitoring Various sports	0.184	0.182	0.185	0.996	0.320

VPF1<- Virtual Playing fields	0.154	0.084	0.364	0.424	0.672
VPF2<- Virtual Playing fields	0.915	0.866	0.141	6.488	0.000
VPF3<- Virtual Playing fields	0.852	0.807	0.151	5.630	0.000
VPF4<- Virtual Playing fields	0.413	0.375	0.180	2.293	0.022
VPF5<- Virtual Playing fields	0.333	0.302	0.211	1.583	0.011

The above result represents a significant analysis of each factor. The result presents the original sample values, average mean, standard deviation, T statistic values, and the P values of each matrix in between independent and dependent variables. The first matrix is MVS1<-Monitoring various sports; its original sample value is 0.963 the sample mean value is 0.892, shows that 89% average values. The standard deviation rate is 10%, its T statistic value is 9.563, and its P value is 0.000 showing that positive and significant effect between MVS1 and Monitoring various sports. The second matrix in between MVS2<-monitoring various sports its original sample value is -0.124, its sample mean value is -0.131, the standard deviation rate is 0.194, its T statistic value is 0.637, and the P value is 52%. Similarly, the third, fourth, and fifth matrix between MVS3, MVS4, and MVS5 with monitoring various sports according to the result its original sample values are 0.197, 0.322, and 0.184 shows that 197%, 322%, and 184% values of variables. the VPF<-virtual player fields its original sample values are 0.154, 0.915,0.852,0.413 and 0.333 respectively. the result shows that its mean values are 8%, 86%, 80%, 37%, and 30% average mean value. The standard deviation rates are 42%, 48%, 15%, 14% and 21% deviate from mean. The result accepts hypothesis H1 and rejects the second hypothesis, H2; there is a positive and significant use of virtual playing fields for monitoring various sports.

6. Conclusion

In conclusion, it is examined that with the development of technologies, information technology is providing various applications to every sector including banking, education, agriculture industries, and sports sectors. It studied that information technology has provided various applications to the sports sectors in terms of virtual reality technology in the form of virtual playing fields for monitoring multiple sports. This research paper highlights that virtual reality can generate a real-world environment. It has the potential to change how education is currently delivered. It can also be used in businesses, healthcare, stability, the army, and anti-terrorism, raising awareness of traffic accidents, weather prediction, and other fields. Particularly, it has significant application in sports sectors. We studied the research on the various applications of virtual playing fields for the monitoring system of different sports. For

this purpose, detailed research has been conducted on the sports monitoring system, and sample data has been collected through questionnaire surveys from various sports sectors that have been utilizing virtual playing fields to improve athletes' training. It is examined that establishing a virtual environment in the sports field can contribute to developing the sports monitoring system. Sports are the most popular form of recreation among most people around the world. Therefore, improving sports-related activities through the use of technology-based innovative software seems critical. Based on primary data, this study concluded that virtual playing fields have a positive and significant use for monitoring various sports.

In various sports fields, virtual playing field has been used as an effective methodology for improving performance. Furthermore, there are several advantages of the utilization of the virtual playing field, such as it can create a natural environment for training various sports, for example, keeping a certain state of the environment in place to allow for the execution of different sports. This kind of virtual environment can also facilitate monitoring all practices of the various sports field. Apart from this, it detects the postures and movements of the athletes effectively during sports matches, which in turn can improve the performance graph of the particular sport. We concluded that VR can promote healthy sports psychology and rapid recovery for sports injuries, particularly in competitive sports like basketball or rugby. Athletes can now start practicing plays and psychologically get ready for the upcoming competition instead of feeling defeated. Therefore, it can be stated that virtual reality technologies have significant positive influences on the development of the sports monitoring system. By using various applications of the information technology as well as virtual playing fields, many computerized sensing devices has been developed that have provided vast advantages to the virtual playing field to enhance monitoring system of the different sport. In addition, it is also revealed that with the fast development of the modern world, technology has become the essential part of every developing sector, so in order to improve the monitoring of various sports sector, there must need to improve virtual reality technology in the virtual playing fields first. This research conducted 100 sample question for measuring the result related to the use of virtual playing fields for monitoring various sports. Future researcher increase your sample size, results then perform at better research study.

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